

Date: Tuesday, 1/15/2008 3:07:56 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 412 X-TUBE LOW NARROW AFT
 Job Number : 36768
 Estimate Number : 13020
 P.O. Number :
 This Issue : 1/15/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D412664209
 First Issue : 1/15/2008 Type : LANDING GEAR Drawing Number : D412-664-209 U/R A
 Previous Run : 34754 Drawing Revision : N/A
 Material :
 Due Date : 2/4/2008 Qty: 1 Um: Each
 Written By :
 Checked & Approved By :
 Comment : Est Rev:A New Issue 07.09.12 EC verified by: JLM
 Est Rev:B ECN 1100 08-01-11 DD verified by EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D212-664-209 CHG001

KS 08.01.29

2.0

D6008132P

Crosstube extrusion



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6008-132 Crosstube

Check OD = 3.250"; ID = 2.375"

B26548

unable to enter BG 08.01.19

3.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: 1-TURN AS PER FOLIO FA708 & DWG D412-664-249,

FOLIO REV: AA

DWG REV: A

2-DEBURR AS REQUIRED

BG 08.01.19

4.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

BG 08.01.19

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

9m 08/01/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/15/2008 3:07:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 412 X-TUBE LOW NARROW AFT

Job Number: 36768

Part Number: D412664209

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Polish entire outside surface of crosstube

AWM 08-01-22

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

DP 8-1-22

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

JB 8-1-22

9.0

QC3/5

INSPECT WORK/WING WALK



Comment: Inspect work & Chemical conversion Coat

DP 8-1-22

10.0

BENDING

BENDING MACHINE



Comment: BENDING MACHINE

Beid tube as per Dwg D412-664-249 using CNC bender program and Folio FT

EL 8-1-24

11.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

08/02/04 (XL)

12.0

D36601

CUFF



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

CUFF

Batch: B36651

*

EL 8-2-6

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1.0 Cut to height EL/JD 8-2-4

1.1-Drill Rivet holes as per Dwg D412-664-249

2-Drill pilot holes in tube as per Dwg D412-664-249

3-Ream hole to finish size in tube as per Dwg D412-664-249

EL/H

8-2-6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/15/2008 3:07:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 412 X-TUBE ,LOW NARROW AFT

Job Number: 36768

Part Number: D412664209

Job Number:



Seq. #:

Machine Or Operation:

Description :

4-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D412-664-249

ALUM 08-02-07

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



ALUM 08-02-07



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat Tube & Cuffs as per QSI 005 4.1

15.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08/02/14 (X)

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/02/14 (X)

17.0

OUTSIDE SERV.10

OUTSIDE SERVICES -LG



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038

Issue P/O: *5729* LPI as per ASTM 1417

Level 2 Attach copy of NDT results to work order

08/02/14 (X)

18.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage

Ensure copy of NDT results attached to work order.

08/02/15

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: Inspect for damage & ensure results are as per Dwg D412-664-203

08-02-14 (X)

20.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Rivet Cuffs as per Dwg D412-664-249. with Sika flex in Between tube & Cuff

A/R SIKAFLEX -241/-291 BATCH: *M105 484*

EL 4-2-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/15/2008 3:07:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 412 X-TUBE ,LOW NARROW AFT

Job Number: 36768

Part Number: D412664209

Job Number:



Seq. #:

Machine Or Operation:

Description:

21.0

CR3212407

CHERRY RIVET



Comment: Qty.: 44.0000 Each(s)/Unit Total: 44.0000 Each(s)

CHERRY RIVET

Batch: M104071

EL 8-2-19

22.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per QSI 005 4.2

25 08-02-19

23.0

QC14

INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

Wrap in plastic bag to protect from scratches

08-02-20

24.0

D28961

Support



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Support

Batch: 33471

ml 08 02 21

25.0

D31891

Chafing Shield



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Chafing Shield

Batch: 37185/36065

25 08-02-20

26.0

D3595

Rubber Cushion (per sq ft)



Comment: Qty.: 0.0263 sf(s)/Unit Total: 0.0263 sf(s)

Rubber Cushion

Cut to .630" X 5.70" Qty 2

Batch: 35126

ml 08 02 21

27.0

MS219208

Clamp(per.MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Clamp

Batch: 104423

25 08-02-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/15/2008 3:07:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 412 X-TUBE LOW NARROW AFT

Job Number: 36768

Part Number: D412664209

Job Number:



Seq. #:

Machine Or Operation:

Description:

28.0

MS2192030

clamp(per MIL-DTL-8783C)



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)
clamp(per MIL-DTL-8783C) M106810

W 08 02 21

29.0

D28566001009

Abrasion strip



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)
Abrasion strip
batch B36398

W 08 02 21

30.0

AN640A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)
Bolt
batch M106516

31.0

AN641A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)
Bolt
batch M104427

32.0

MS21042L6

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total: 6.0000 Each(s)
Nut
batch M105077

33.0

AN960JD616

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total: 18.0000 Each(s)
Washer
batch M106883

W 8/4/27 ①

34.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1
Assemble as per dwg D412-664-249

13 105 379
exp: 05/2008

Instal support with magnobond 6398 per dwg D412-664-249,
cure for 12hrs before packaging.

Time & date of application: 08/02/21 9:00AM

W 08/02/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: PD Date: 08/01/27
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/15/2008 3:07:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 412 X-TUBE ,LOW NARROW AFT

Job Number: 36768

Part Number: D412664209

Job Number:



Seq. #:

Machine Or Operation:

Description :

Batch:

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

PACKAGING 1

PACKAGING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Identify and pack for shipping as per PPP D412-664-209

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



36. Qc4

080227

08-02-27

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	36768
Description: Crosstube Assembly (412 Low Aft)		Part Number:	D412-664-249
Inspection Dwg: D412-664-249 Rev: A		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

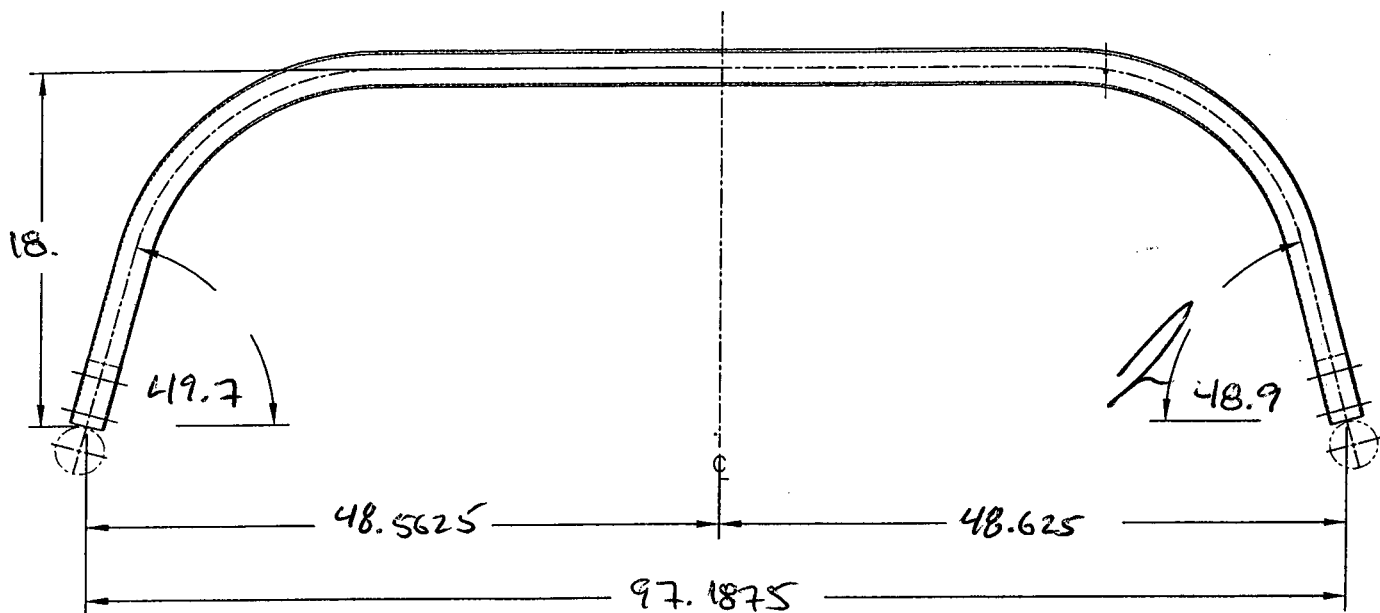
Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.680	± 0.010	2.678	✓		
	2.680	± 0.005 ± 0.005 -0.000	2.684	✓		
	2.687	"	2.689	✓		
	2.793	"	2.796	✓		
	2.930	"	2.933	✓		
	3.067	"	3.070	✓		
	3.205	"	3.207	✓		
	3.358	"	3.359	✓		
SIDE B	127.82"	± 0.020	127.840	✓		
	2.680	± 0.010	2.678	✓		
	2.680	± 0.005 ± 0.005 -0.000	2.683	✓		
	2.687	"	2.690	✓		
	2.793	"	2.797	✓		
	2.930	"	2.933	✓		
	3.067	"	3.070	✓		
	3.205	"	3.209	✓		
	3.358	"	3.359	✓		

Measured by:	BC	Audited by:	amb	Prototype Approval:	N/A
Date:	08.01.19	Date:	08/01/21	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue (P/O D212-664-209)	KJ/EC/DD	

DART AEROSPACE LTD		Work Order:	36768
Description: Crosstube Low Aft (412)		Part Number:	D212-664-209
Inspection Dwg: D212-664-249 Rev: A		Page 1 of 1	

Required Dimension	Min	Max
Height	17.78	18.04
1/2 Span	48.55	48.81
Angle	49	52
Total Span	97.1	97.62



Comments

QC15 Inspection	<i>[Signature]</i>
Date	08-02-01

Rev	Date	Change	Revised by	Approved
A		New Issue		<i>[Signature]</i>

PARTS LIST:

Qty	Part Number	Description
X	D412-664-249	CROSSTUBE ASSEMBLY (412 LOW AFT)
1	D6009-129	CROSSTUBE
2	D2856-600-1009	ABRASION STRIP
1	D2896-1	SUPPORT
2	D3189-1	CHAFING SHIELD
2	D3595-063-570	RUBBER CUSHION
2	D3660-1	CUFF
44	CR3212-4-07	RIVET (OR M7885/3-4-07)
4	MS21920-28	CLAMP
2	MS21920-30	CLAMP (OR MS21920-32)
A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)
A/R	SIKAFLEX-241/-291	SEALANT (OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT)

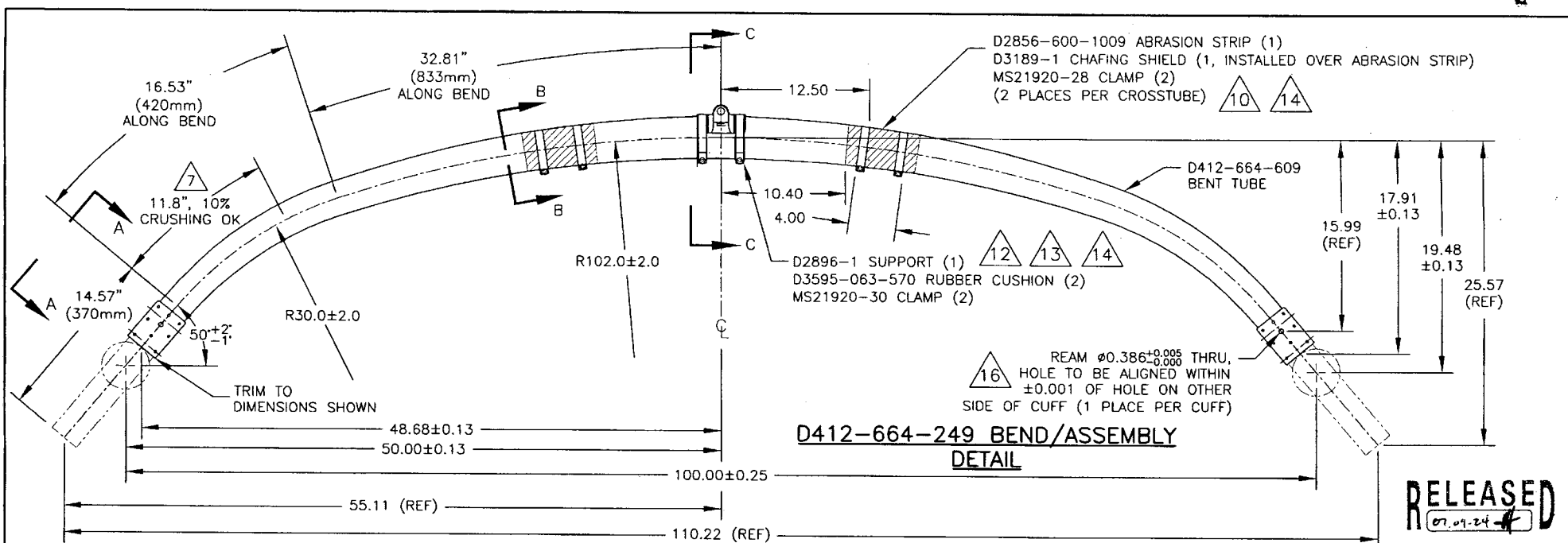
GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6009-129
FINISHED LENGTH = 127.82±0.020 (BEFORE BENDING/TRIMMING)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) PART IS SYMMETRIC ABOUT CENTERLINE.
- 6) WHEN MACHINING TAPER, RUN-OFF PART AT STOCK. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 7) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D., EXCEPT UP TO 10% IS ALLOWED IN AREA NOTED.
- 8) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 9) SCRIBE DART PART NUMBER AND BATCH NUMBER ON INNER SURFACE OF TUBE WITH A VIBRATING STYLUS.
- 10) INSTALL D2856-600-1009 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE PER QSI 035.
- 11) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 12) APPLY A 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2896-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-30 CLAMPS (OR -32) WITH D3595-063-570 RUBBER CUSHIONS TO SECURE D2896-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE CROSSTUBE SUPPORT.
- 14) TORQUE CLAMPS 80 TO 100 IN.-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.
- 15) INSTALL D3660-1 CUFF AFTER CHEMICAL CONVERSION COAT BUT BEFORE PAINT, WITH A LAYER OF SIKAFLEX-241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT BETWEEN CUFF AND CROSSTUBE. SEAL EDGE OF CUFF TO ENSURE NO GAPS.
- 16) TOUCH-UP HOLES WITH CHEMICAL CONVERSION COAT.

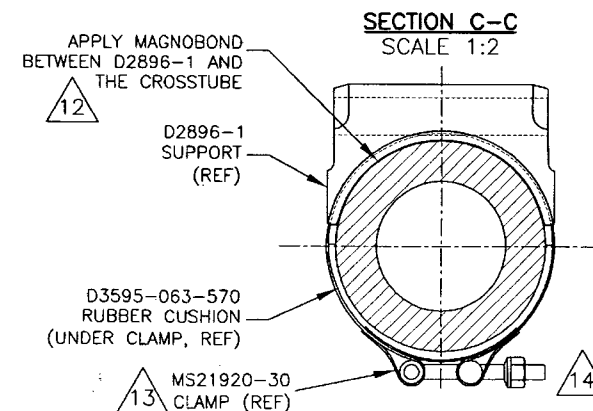
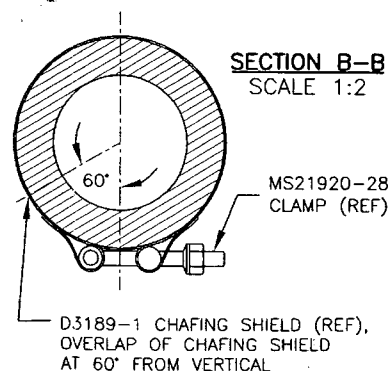
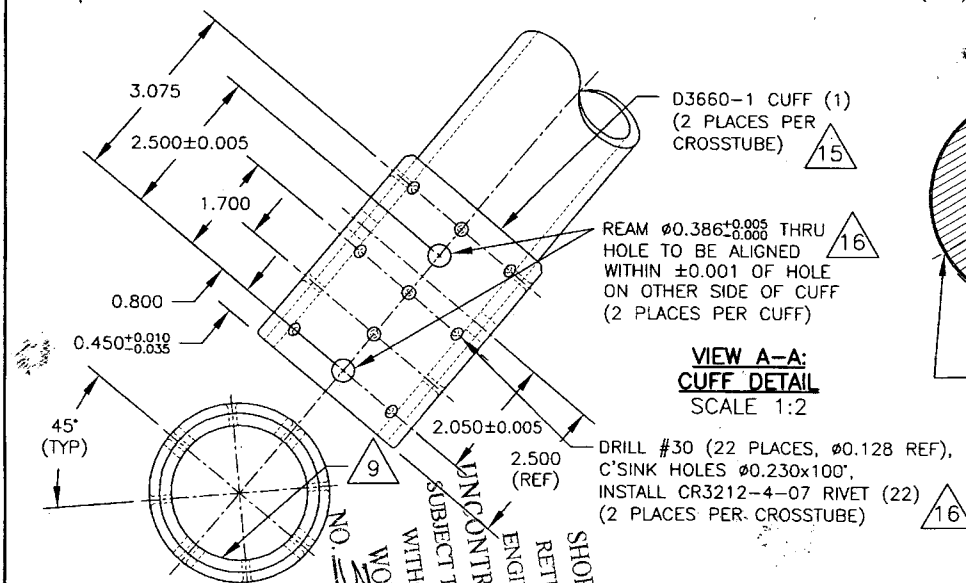
RELEASED
07-04-24

NO. 36768
WORK ORDER
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
ENGINEERING
RETURN TO
SHOP COPY

A		07.07.07	NEW ISSUE	
DESIGN		UP	DRAWN BY UP	
CHECKED		RET	APPROVED	
DATE		07.07.07	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		DRAWING NO. D412-664-249		REV. A SHEET 1 OF 3
		TITLE CROSSTUBE (412 LOW AFT)		SCALE NTS



RELEASED
07.07.24

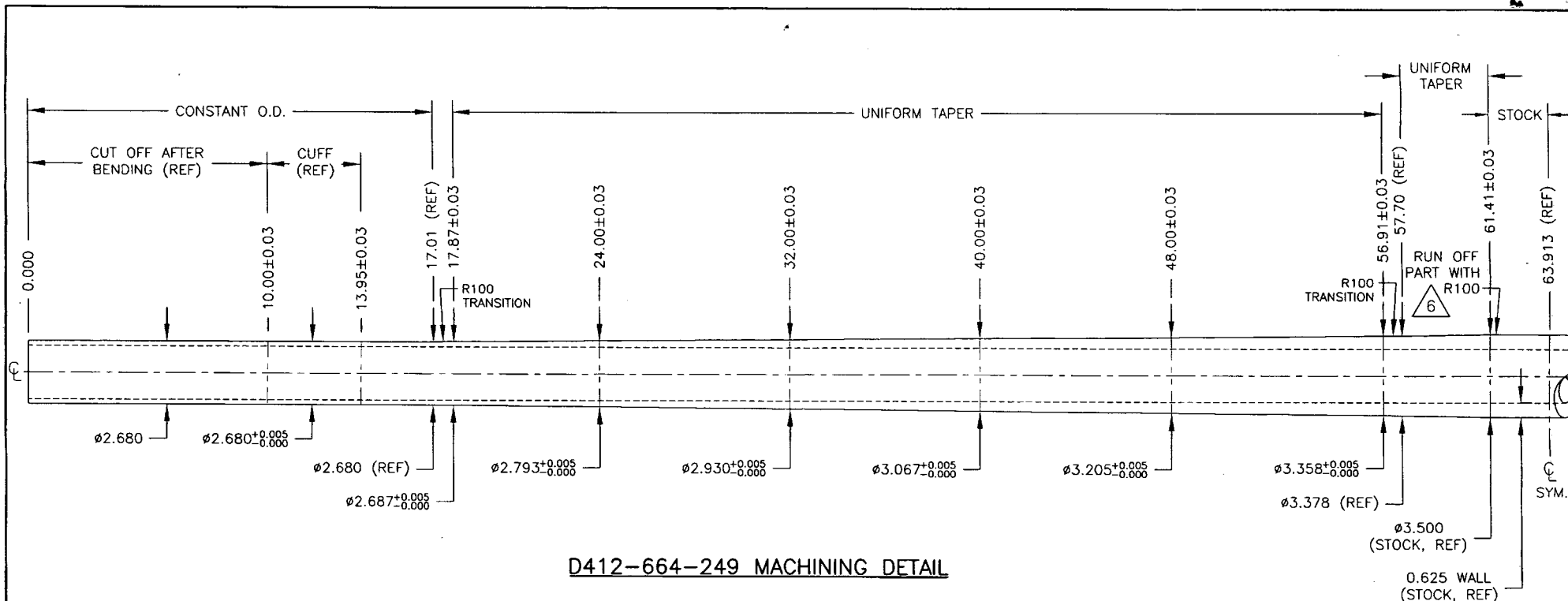


COPYRIGHT © 2007 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DESIGN	40	DRAWN BY	40	DART	DART AEROSPACE LTD. WILKESBORO, ONTARIO, CANADA
CHECKED	24	APPROVED	24	DRAWING NO.	D412-664-249
DATE	07.07.07	TITLE	CROSSTUBE (412 LOW AFT)	REV. A	SHEET 2 OF 3
				SCALE	1:8

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
36768



RELEASED
07.09.24

NO. 36768
WORK ORDER
WITHOUT NOTICE
SUBJECT TO AMENDMENT
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY

COPYRIGHT © 2007 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DESIGN 9P	DRAWN BY 9P	DART	DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA
CHECKED RA	APPROVED H	DRAWING NO. D412-664-249	REV. A SHEET 3 OF 3
DATE 07.07.07		TITLE CROSSTUBE (412 LOW AFT)	SCALE 1:4



LIQUID PENETRANT TEST REPORT

P- 09830

PAGE 1 OF 1

CLIENT Dart AREOSPACE
ATTENTION Linda Lucelle
ADDRESS 1270 Aberdeen st.
Hawkesbury ontario

DATE Feb 15, 2008 TIME AM ☐ PM ☐
ACUREN JOB No. 188-08-1220
PO/NO No. 5729
WORK LOCATION Hawkesbury
ACCEPTANCE STD. ASTM 1417/AS1-03B REV./DATE 2005

PROJECT 212 X-TUBE, LOW NARROW AFT and FWD, 407 HIGH AFT X-TUBE ASSEMBLY, 412 X-TUBE LOW NARROW AFT
ITEM(S) EXAMINED Job# 36642 - 36644 - 36645 - 36768 - 36770 - 36773 - 37009 - 37010

JOB DESCRIPTION PROCEDURE No. LT-XXXX REV./DATE TECHNIQUE No. LT-XXXX-XXX REV./DATE
PART No. D212664107-D212664207-D212664307-D212664407-D212664507-D212664607-D212664707-D212664807-D212664907-D212665007 MATERIAL ALLOYED ALUMINUM
SCOPE WET FLOURESCENT LIQUID PENETRANT INSPECTION CARRIED OUT ON 100% OF EXTERNAL SURFACE

TEST DETAILS
METHOD ☒ FLUORESCENT ☐ VISIBLE ☒ WATER WASH ☐ SOLVENT REMOVABLE ☐ POST EMULSIFIED
FAMILY BRAND MagnaFlux BLACK LIGHT S/N 8178 ☒ OUTPUT > 1000 μ W/cm² ☐ AMBIENT < 2 fc
PENETRANT 2L67 MINIMUM DWELL TIME 405 MIN. LIGHTING EQUIP. ☒ FLASHLIGHT ☐ TROUBLELIGHT ☒ OUTPUT > 100 fc @ SURFACE
PENETRANT REMOVER H2O MINIMUM DRY TIME >10 MIN. OTHER
DEVELOPER SKDS2 MINIMUM DWELL TIME 10 MIN. LIGHT METER S/N
DEVELOPER TYPE ☒ NON AQUEOUS ☐ AQUEOUS ☐ DRY CAL DUE DATE MAR 08

TEST SURFACE
SURFACE CONDITION ☒ AS GROUND ☐ AS WELDED ☐ MACHINED ☐ SHOT BLASTED ☐ CLEAN BARE METAL
SURFACE TEMPERATURE ☐ < -4°C/20°F ☐ -4°C/20°F TO 10°C/50°F ☒ 10°C/50°F TO 52°C/125°F ☐ > 52°C/125°F

RESULTS- (☐ METRIC ☐ IMPERIAL)

ITEM	COMMENTS	ACCEPT	REJECT
Job# 36642	ACCEPTABLE		
36644	ACCEPTABLE		
36645	ACCEPTABLE		
36768	ACCEPTABLE		
36770	ACCEPTABLE		
36773	ACCEPTABLE		
37009	ACCEPTABLE		
37010	ACCEPTABLE		

Scope of Services
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES

CLIENT REPRESENTATIVE Matthew Murdoch SIGNATURE Matthew Murdoch DTR #
TECHNICIAN (SIGNATURE): Chagnon Frederick SIGNATURE Chagnon Frederick
NAME (PRINT): Chagnon Frederick 1st TECHNICIAN
CGSB LEVEL II SNT LEVEL II CGSB REG. NO. 10560
2nd TECHNICIAN
CGSB LEVEL II SNT LEVEL II CGSB REG. NO. 10560
REPORT REVIEWED BY: NAME INITIALS

